CEPE Response and Actions for EN 1090

Introduction

The Construction Products Regulations 2011 requires manufacturers of construction products to provide a ‘Declaration of Performance’ (DoP) and apply a CE Mark to their products. This in turn requires the product to be controlled by a Harmonised European Norm (hEN) or a European Technical Approval (ETA).

The steel fabrication industry has a hEN in place which makes a CE mark mandatory for their products. Where a coating is applied to the steel the steel fabricator has to be made aware of the implications to his claims according EN 1090. CEPE recommend that paint manufacturers should inform steel suppliers and fabricators as follows:

1. **Release of Cadmium and its compounds**

   Cadmium will only occur in coatings as an impurity in certain ingredients, which are subject to control (on the ingredient supplier) through strict EU chemical regulations like REACH. It is therefore unnecessary for paint manufacturers to measure the release of Cadmium, so declaring ‘NPD’ (No Performance Determined) is recommended.

2. **Emission of Radioactivity.**

   Paint manufacturers are not allowed to use radioactive ingredients in their formulations. Iron oxide is known to have some background radio-activity, but tests carried out in Germany showed no radioactivity when this pigment was incorporated into coatings.

   It is therefore recommended that manufacturers can legitimately declare ‘NPD’ for radioactive emissions for all their products.

3. **Reaction to Fire.**

   The declaration for reaction to fire should be made in accordance with the classification requirements of EN 13501-1. This standard includes the option of declaring Class F – No Performance Determined. This is the initial response recommended by CEPE.

   In the event that the client requires a specific classification for reaction to fire, the current position is that testing (of the specified paint system) to EN 13501-1 would be necessary.

4. **Resistance to Fire**

   EN 1090 states that a DoP may be made for fire resistance, so this appears to be optional. However, if specific fire resistance performance is required, coating systems should be classified to EN 13501-2 and should have been tested to the EN 13381 series. ETAs for systems classified against this standard by EOTA are listed on the EOTA website against guideline 018.
Where a fabricator wishes to use existing National approvals, they should declare NPD for fire resistance.

5. Durability and CE Marking

CE Marking is relatively easy for fixed articles, but much more difficult for products and systems which consist of variable ingredients, applied by variable methods to surfaces that are themselves variable, then exposed to a variety of environments.

There are no hENs or ETA’s in place for steel protection coating systems, and CE Marking of such coatings is therefore not possible.

Under EN1090, fabricators are required to declare a durability performance, so should provide coating systems that comply with the appropriate durability classification of EN ISO 12944.

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